

## CLAIMS

1. A stent having a metallic, relatively radiolucent carrier structure (12, 16) which is made from a metal tube as starting material by cutting out, and at least one marker element (22) which includes comparatively radiopaque material (32), characterized in that after the cutting-out operation the marker element (22) is welded to the rest of the carrier structure (12, 16) and the radiopaque material (32) is completely enclosed by a cover layer (34) of a material other than the radiopaque material, the cover layer (34) including metal or a metal compound.
2. A stent as set forth in claim 1 characterized in that the stent has a carrier structure (12, 16) which is produced by cutting out legs (12, 16) and apertures for marker elements (22) from a metal tube and the marker elements (22) are welded into said apertures.
3. A stent as set forth in claim 1 or claim 2 characterized in that the stent (10) has a self-expanding carrier structure.
4. A stent as set forth in claim 3 characterized in that the carrier structure (12, 16) includes a shape memory metal which changes its shape at a change temperature, wherein the stent is of such a design configuration that the stent retains a compressed condition below the change temperature and assumes an expanded condition above the change temperature.
5. A stent as set forth in claim 1 characterized in that the cover layer contains silicon carbide (SiC).
6. A stent as set forth in claim 1 characterized in that the cover layer (34) is formed by a metal which forms the metallic carrier structure and into which the radiopaque material (32) is let.

7. A stent as set forth in claim 6 characterized in that the marker element (22) is formed by radiopaque material (32) filling a lumen of a tube (34) formed from the metal of the carrier structure.

8. A stent as set forth in claim 7 characterized in that the tube forms at least a part of the carrier structure.

9. A stent as set forth in one of claims 1 through 8 characterized in that the marker element forms at least a part of the carrier structure in the region of a longitudinal end of the stent.

10. A stent as set forth in one of claims 1 through 9 characterized in that the marker element is welded to the rest of the carrier structure in the region of a longitudinal end of the stent (10).

11. A stent as set forth in claim 1 characterized in that the metal forming the carrier structure is entirely or partially a titanium nickel alloy such as nitinol.

12. A stent as set forth in claim 1 characterized in that the radiopaque material contains gold, platinum or palladium.